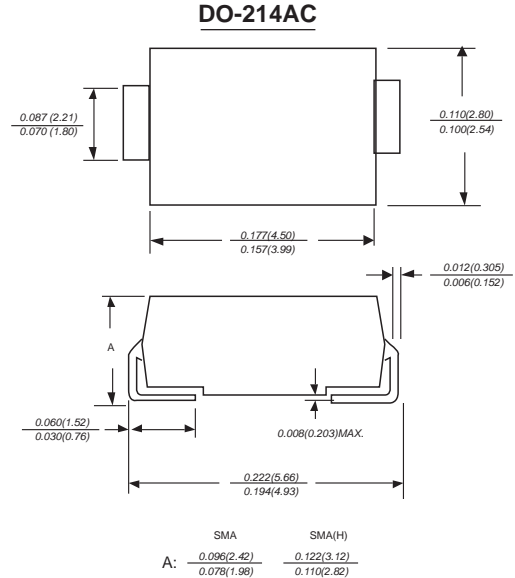


### FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Ultra fast switching for high efficiency
- ◆ Low reverse leakage
- ◆ Built-in strain relief, ideal for automated placement
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed 250 °C/10 seconds at terminals

### MECHANICAL DATA

**Case:** JEDEC DO-214AC molded plastic body  
**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026  
**Polarity:** Color band denotes cathode end  
**Mounting Position:** Any  
**Weight:** 0.003 ounce, 0.093 grams  
 0.004 ounce, 0.111 grams SMA(H)



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.  
 Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

	SYMBOLS	US1A	US1B	US1D	US1G	US1J	US1K	US1M	UNITS
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	VOLTS
Maximum average forward rectified current at T <sub>L</sub> =55°C	I <sub>(AV)</sub>	1.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	30.0							Amps
Maximum instantaneous forward voltage at 1.0A	V <sub>F</sub>	1.0			1.4	1.7			Volts
Maximum DC reverse current     T <sub>A</sub> =25°C at rated DC blocking voltage    T <sub>A</sub> =100°C	I <sub>R</sub>	5.0 50.0							uA
Maximum reverse recovery time   (NOTE 1)	t <sub>rr</sub>	50				75			ns
Typical junction capacitance (NOTE 2)	C <sub>J</sub>	15.0							pF
Typical thermal resistance (NOTE 3)	R <sub>qJA</sub>	50.0							°C/W
Operating junction and storage temperature range	T <sub>J</sub> ,T <sub>STG</sub>	-65 to +150							°C

**Note:** 1.Reverse recovery condition  $I_F=0.5\text{A}$ ,  $I_R=1.0\text{A}$ ,  $t_{rr}=0.25\text{A}$   
 2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.  
 3.P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

